L24 ANSWER 18 OF 20 USPATFULL

ACCESSION NUMBER: 1999:92519 USPATFULL

TITLE: Monoclonal antibody that detects apoptotic antigen

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	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5935801		19990810	<--
APPLICATION INFO.:	US 1996-623876		19960329	(8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Chan, Christina Y.
ASSISTANT EXAMINER: Nolan, Patrick J.
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NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 6
NUMBER OF DRAWINGS: 18 Drawing Figure(s); 11 Drawing Page(s)
LINE COUNT: 888
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A monoclonal antibody which specifically binds to an antigen on the membrane of mitochondria in apoptotic cells. The antigen is a 38 kD protein that is detectable in cells undergoing apoptosis and undetectable in normal cells. This selectivity of the monoclonal antibody provides a method of distinguishing between normal and apoptotic cells in a sample of human hemopoietic cell populations. A method for detecting and measuring cells undergoing apoptosis is also provided.

L24 ANSWER 17 OF 20 USPATFULL

ACCESSION NUMBER:	1999:132512 USPATFULL			
TITLE:	Method of detecting apoptosis using an anti-human GP46 monoclonal anti-body			
INVENTOR(S):	Desjardins, Louise, 1139 St. Jovite Ridge, Gloucester, Ontario, Canada K1C 1Y6			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5972622		19991026	<--
APPLICATION INFO.:	US 1997-796841		19970206	(8)
	NUMBER		DATE	
PRIORITY INFORMATION:	US 1996-11324P		19960208	(60)
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	Granted			
PRIMARY EXAMINER:	Hutzell, Paula K.			
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NUMBER OF CLAIMS:	15			
EXEMPLARY CLAIM:	1,8			
NUMBER OF DRAWINGS:	4 Drawing Figure(s); 4 Drawing Page(s)			
LINE COUNT:	1275			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to antibodies or fragments thereof that can be used as indicators of apoptosis. More specifically, this invention relates to antibodies and fragments thereof that selectively bind GP46, a protein whose levels increase significantly upon induction of apoptosis. This invention also relates to the hybridomas that produce anti-GP46 monoclonal antibodies. This invention also discloses a method of detecting cell death by apoptosis in vitro or in vivo by detecting and quantifying GP46 present in biological samples, comprising contacting the sample with the antibodies or fragments to form GP46 immunocomplexes, which may then be detected by the use of known methods.

This detection method is useful for research into apoptosis and research relating to diseases in which apoptosis is involved. This method could also be used to diagnose the extent of damage caused by a particular disease or to evaluate the efficacy of drug treatments. The present invention also relates to a method of using the anti-GP46 antibodies or fragments in nuclear medical imaging. The present invention further relates to therapeutic uses of the anti-GP46 antibodies or fragments. The antibodies or fragments can also be incorporated into kits for the detection of apoptosis.